

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 1. (Currently amended): An optical mouse system comprising a printed
2 circuit board, the optical mouse system further comprising:
3 ~~a printed circuit board;~~
4 ~~a motion sensor operatively coupled to said printed circuit board, said motion~~
5 ~~sensor having a motion signal output; and~~
6 a contact pad comprising a plurality of stationary contacts disposed on a major
7 surface of said printed circuit board of said optical mouse system;
8 a ball contact movably disposed atop said stationary contacts of said contact pad;
9 a housing enclosing said ball contact and a portion of said contact pad, said
10 housing sealably disposed on said major surface of said printed circuit board of said optical
11 mouse system, at least two of said stationary contacts extending along said major surface beyond
12 an interior of said housing from between said housing and said major surface; and
13 a detection circuit connected to said at least two of said stationary contacts ~~motion~~
14 ~~signal output~~ and having a trigger signal output~~[[,]].~~
15 ~~said motion sensor comprising:~~
16 ~~a ball contact; and~~
17 ~~at least one stationary contact formed directly on a surface of said printed~~
18 ~~circuit board,~~
19 ~~wherein said ball contact is in electrical contact with said at least one~~
20 ~~stationary contact,~~
21 ~~said optical mouse having a sleep state and a wake state,~~

22 ~~wherein said optical mouse is inactive during said sleep state and electric current~~
23 ~~consumption by said optical mouse during said sleep state is less than electric current~~
24 ~~consumption by said optical mouse during said wake state,~~
25 ~~wherein said optical mouse transitions from said sleep state to said wake state~~
26 ~~when a trigger signal is produced at said trigger signal output.~~

2. (Canceled)

1 3. (Previously presented): The system of claim 1, wherein said trigger
2 signal output is a wake-up signal output.

4. (Canceled)

1 5. (Currently amended): The system of claim 1, wherein said ~~motion sensor~~
2 ~~is contact pad and said ball contact constitute~~ a mechanical motion sensor.

1 6. (Currently amended): The system of claim 5, wherein said ~~motion sensor~~
2 ~~is contact pad and said ball contact constitute~~ a tilt sensor.

7-10. (Canceled)

1 11. (Previously presented): The system of claim 1, wherein said at least one
2 stationary contact is printed on said printed circuit board.

1 12. (Previously presented): The system of claim 1, wherein said at least one
2 stationary contact has a hole in a center thereof.

1 13. (Previously presented): The system of claim 1, wherein the at least one
2 stationary contact has an inclined surface toward a center thereof.

1 14. (Previously presented): The system of claim 6, wherein a sensitivity of
2 said tilt sensor is adjustable during manufacture of said tilt sensor.

1 15. (Currently amended): The system of claim 6, wherein said ~~at least one~~
2 ~~stationary~~-contact pad has a hole in a center thereof, and a sensitivity of said tilt sensor is
3 adjusted by a size of the hole.

1 16. (Previously presented): The system of claim 14, wherein the sensitivity of
2 said tilt sensor is adjustable by a size of the ball contact.

1 17. (Previously presented): The system of claim 14, wherein the sensitivity of
2 said tilt sensor is adjustable by a weight of the ball contact.

1 18. (Previously presented): The system of claim 14, wherein the sensitivity of
2 said tilt sensor is adjustable by a conductivity of the ball contact.

19. (Canceled)

1 20. (Currently amended): The system of claim [[19]]6, wherein the plurality
2 of stationary contacts are wedge-shaped elements arranged about a central point.

1 21. (Currently amended): The system of claim [[19]]6, wherein there are at
2 least 2 stationary contacts.

22. (Withdrawn, Currently amended): The system of claim [[19]]6, wherein
there are at least 4 stationary contacts.

23. (Withdrawn, Currently amended): The system of claim [[19]]6, wherein
there are at least 6 stationary contacts.

24. (Withdrawn, Currently amended): The system of claim [[19]]6, wherein
there are at least 8 stationary contacts.

1 25. (Previously presented): The system of claim 6, wherein said ball contact
2 is a conductive ball.

1 26. (Previously presented): The system of claim 6, wherein the ball contact is
2 gold-plated.

1 27. (Previously presented): The system of claim 6, wherein said stationary
2 contact is gold-plated.

1 28. (Original): The system of claim 1, wherein said motion sensor further
2 includes a housing and said housing is sealed.

 29. (Withdrawn): The system of claim 28, wherein said housing is sealed
with an O-ring.

1 30. (Original): The system of claim 28, wherein said housing is sealed with
2 an adhesive.

1 31. (Currently amended): The system of claim 1, wherein said ~~motion sensor~~
2 ~~comprises~~ contact pad and ball contact constitute an electrical switch and said detection circuit
3 detects a change in a state of whether said switch is opened or closed.

1 32. (Previously presented): The system of claim 31, wherein said detection
2 circuit comprises: a motion detector that determines if there is a change in the opened or closed
3 state of the electrical switch; and a signal processing circuit having a latch circuit, wherein said
4 latch circuit creates a signal of a particular level for a period of time to generate a wake-up
5 signal.

 33-35. (Canceled)

 36. (Withdrawn): A method for operating an input device, wherein the
device includes a printed circuit board, comprising:

 operatively coupling a motion sensor to said printed circuit board, said motion
sensor comprising:

a ball contact; and
at least one stationary contact formed directly on a surface of said printed circuit board of said device,
wherein said ball contact is in electrical contact with said at least one stationary contact;
outputting a motion signal from said motion sensor;
providing a detection circuit responsive to said motion signal; and
outputting a wake-up signal from said detection circuit to circuitry of said input device to activate said input device.

37. (Withdrawn): The method of claim 36, wherein said input device further comprises a microprocessor and said microprocessor wakes-up the input device in response to said wake-up signal from said detection circuit.

38. (Canceled)